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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/528,399	03/17/2005	Richard Alan Walker	AP052-05	4280
29689	7590	08/20/2007		
DAVID A. GUERRA			EXAMINER	
INTERNATIONAL PATENT GROUP, LLC			WENDELL, MARK R	
2025 17TH AVENUE N.W.				
CALGARY, AB T2M 0S7			ART UNIT	
CANADA			PAPER NUMBER	
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			08/20/2007	
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**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

<b>Office Action Summary</b>	<b>Application No.</b>		<b>Applicant(s)</b>	
	10/528,399		WALKER, RICHARD ALAN	
	<b>Examiner</b>		<b>Art Unit</b>	
	Mark R. Wendell		3609	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 17 March 2005.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-16 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-5, 7-9 and 11-16 is/are rejected.
- 7) ☐ Claim(s) 6 and 10 is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 17 March 2005 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All    b) ☐ Some \*    c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- |   |   |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)   | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)  | 5) <input type="checkbox"/> Notice of Informal Patent Application                       |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)<br>Paper No(s)/Mail Date <u>20050317</u> . | 6) <input type="checkbox"/> Other: _____  |

## **DETAILED ACTION**

### ***Priority***

Receipt is acknowledged of papers submitted under 35 U.S.C. 119(a)-(d), which papers have been placed of record in the file.

### ***Drawings***

The drawings are objected to under 37 CFR 1.83(a). The drawings must show every feature of the invention specified in the claims. Therefore, the central web of claim 2 must be shown or the feature canceled from the claim. No new matter should be entered.

Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement-drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. The figure or figure number of an amended drawing should not be labeled as "amended." If a drawing figure is to be canceled, the appropriate figure must be removed from the replacement sheet, and where necessary, the remaining figures must be renumbered and appropriate changes made to the brief description of the several views of the drawings for consistency. Additional replacement sheets may be necessary to show the renumbering of the remaining figures. Each drawing sheet submitted after the filing date of an application must be labeled in the top margin as either "Replacement Sheet" or "New

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Sheet" pursuant to 37 CFR 1.121(d). If the examiner does not accept the changes, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

### ***Specification***

The abstract of the disclosure is objected to because in line 1, the word "plastics" should be replaced with "plastic." Correction is required. See MPEP § 608.01(b).

The disclosure is objected to because of the following informalities: Page 1, line 8, the word "arrangements" should be inserted between the phrase "typical are." Page 2, line 10, the word "and" should be inserted between the phrase "plug the." Page 3, line 5, a comma should be inserted between the phrase "consequence application." Page 3, line 6, the word "a" should be removed in the phrase "screw a may."

Appropriate correction is required.

### ***Claim Objections***

Claim 4 is objected to because of the following informalities: Claim 4, the phrase "short plug the expander" should be reworded. For examination purposes the examiner will read it to say "short plug and the expander." Appropriate correction is required.

Claim 12 is objected to because of the following informalities: A claim should only be one sentence in length and conclude with a period. Claim 12 is two sentences and should be amended to one. Appropriate correction is required.

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Claim 15 is objected to under 37 CFR 1.75(c) as being in improper form because a multiple dependent claim should refer to other claims in the alternative only. Claim 15 refers to claim 14 and any one of claims 2 to 13. See MPEP § 608.01(n). Accordingly, the claim 15 has not been further treated on the merits.

***Claim Rejections - 35 USC § 112***

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claims 4 and 5 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. The claim defines the connector member as being a long strip and a rod. For examination purposes, the examiner will interpret the second occurrence of "connecting member" to be the "connecting member expander." Also regarding claim 5, the limitation "long" is a relative term with nothing to compare it to and is therefore indefinite.

Regarding claim 4, the limitation "short" is a relative term with nothing to compare it to and is therefore indefinite.

***Claim Rejections - 35 USC § 102***

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 1-5 are rejected under 35 U.S.C. 102(e) as being anticipated by Alley (US 6536166). Regarding claim 1, Alley illustrates in Figure 1 a connector system (10) for connecting members together, the connector system comprising a connector member (200) and a connector member expander (500), the connector member in profile having enlarged ends and a narrower intermediate (300) section between the ends (201, 202), one end having a slot (501) to receive the connector member expander to expand the slot so the enlarged end is biased to retentively engage a body (600) located adjacent the intermediate section.

Regarding claim 2, Alley illustrates in Figure 6 a connector system (10) according to claim 1 wherein the connector member is generally I-shaped in profile having a central web (303) connecting opposed pairs of bilaterally projecting arms (201, 202, 401, 411), at least one set of arms (201, 401) having the expandable slot so that upon axial movement of the expander (500) in the slot (501), the set of arms are biased toward the other set of arms (400, 410).

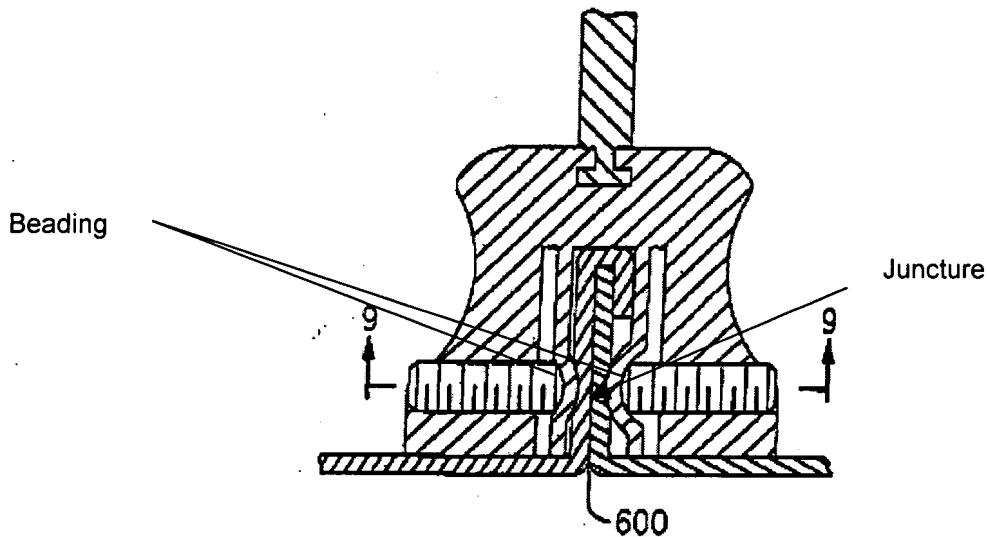
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Regarding claim 3, Alley illustrates in Figure 7 a connector system (10) according to claim 1 wherein the connector member (200) is shaped to match the body (600) that is located adjacent the intermediate section (300).

Regarding claim 4, Alley illustrates in Figure 1 a connector system (10) according to claim 1 wherein the connector member (200) is a short plug and the expander (500) is a grub screw.

Regarding claim 5, Alley illustrates in Figure 1 a connector system (10) according to claim 1 wherein the connector member (200) is a long strip and the connector member expander (500) is a rod driven onto the slot. The examiner notes that the expander (500) is a grooved rod.

Regarding claim 7, Alley illustrates in Figure 7 a connector system (10) according to claim 1 wherein the connector member (200) has a T shaped end with the slot medially located (300), the T-shaped end include peripheral longitudinal beading (see modified Figure below) that contacts the body (600).

**FIG. 7**

Regarding claim 8, Alley illustrates in Figure 7 a connector system according to claim 1 wherein the connector member has arms (401, 411) projecting from the narrow intermediate section (300), there being a juncture between the arms and the intermediate section, there being a small slot at the juncture of the arms being adapted to close or partially close as the arms are biased (see Figure above).

Regarding claim 9, Alley illustrates in Figure 7 a connector system according to claim 1 wherein the connector member has arms (401, 411) projecting from the narrow intermediate section (300), each arm having a bead (see modified Figure above) extending along an edge of the arm, the bead providing a focal line for the bias.

Regarding claim 11, Alley discloses a connector system according to claim 1 wherein the expander (500) is reversible to release the connector. The examiner notes that it is



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well known in the art that a screw, such as the one illustrated by Alley, is reversible and releases whatever it is engaged in.

Regarding claim 14, Bishop illustrates in Figures 1 and 5 a modular window system (Figure 5) comprising window modules and a window module connector system, each window module having slotted outer frame members (103), the connector system comprising an elongate connector member (101) and a connector member expander (115), the connector member being adapted to retentively engage the slots (111) in the slotted members (103) upon application of the expander to the connector member.

Claims 16 is rejected under 35 U.S.C. 102(b) as being anticipated by Lafevre (US 5560149). Lafevre illustrates in Figure 2C an improved window frame assembly (10) having a sash (16), a sill (32, 78) and a seal (156) disposed between the sash and sill, the seal having a section adjacent a lower edge of the window assembly, the sill and sash having complimentary lower marginal sections outboard of said seal and extending along at least the lower edge of the window assembly, the lower marginal sections defining there between an inclined water flow passage means (12), the water flow passage means being downwardly inclined from a position adjacent said seal to the edge of the window assembly.

Claims 1-3, 5, 7, 9 11-12 are rejected under 35 U.S.C. 102(b) as being anticipated by Gold (US 4949509). Regarding claim 1, Gold illustrates in Figures 1 and 2 a connector

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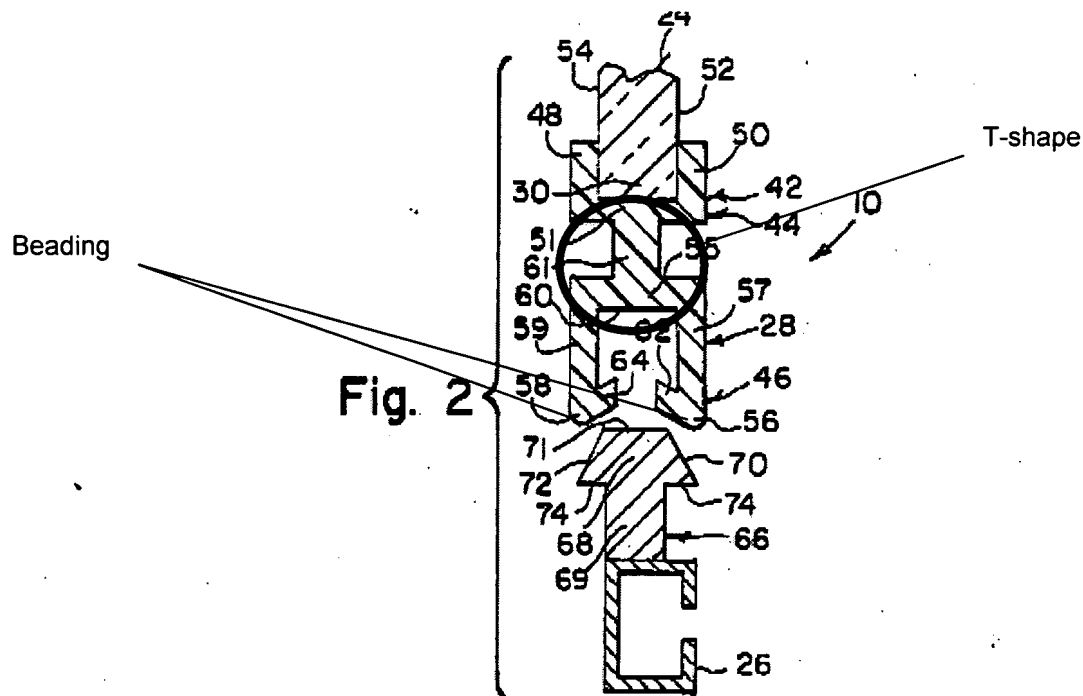
system (10) for connecting members together, the connector system comprising a connector member (28) and a connector member expander (66), the connector member in profile having enlarged ends (56, 58) and a narrower intermediate section between the ends (56, 58), one end having a slot to receive the connector member expander (66) to expand the slot so the enlarged end is biased to retentively engage a body (68) located adjacent the intermediate section.

Regarding claim 2, Gold illustrates in Figures 1 and 2 a connector system (10) according to claim 1 wherein the connector member is generally I-shaped in profile having a central web (61) connecting opposed pairs of bilaterally projecting arms (48, 50, 57, 59), at least one set of arms (57, 59) having the expandable slot so that upon axial movement of the expander (66) in the slot, the set of arms are biased toward the other set of arms (48, 50).

Regarding claim 3, Gold illustrates in Figures 1 and 2 a connector system (10) according to claim 1 wherein the connector member (200) is shaped to match the body (600) that is located adjacent the intermediate section (300).

Regarding claim 5, Gold illustrates in Figures 1 and 2 a connector system (10) according to claim 1 wherein the connector member (28) is a long strip and the connector member expander (66) is a rod driven onto the slot.

Regarding claims 7 and 9, Gold illustrates in Figure 2 a connector system (10) according to claim 1 wherein the connector member (28) has a T shaped end with the slot medially located, the T-shaped end include peripheral longitudinal beading (see modified Figure below) that contacts the body (68) providing a focal line for the bias.



Regarding claim 11, Gold discloses a connector system according to claim 1 wherein the expander (66) is reversible to release the connector.

Regarding claim 12, Gold illustrates in Figure 2 an expander with tapered enlargements (70, 72) at opposite ends.

***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claim 13 is rejected under 35 U.S.C. 103(a) as being unpatentable over Bishop (GB 2291687) in view of Etten (US 2879840). Bishop illustrates in Figure 1 a connector system for connecting members (101, 102) together, the connector system comprising a connector member (101, 102) and a connector member expander (115), the connector member in profile having enlarged ends (107, 108) and a narrower intermediate section between the ends (113, 114), one end having a slot to receive the connector member expander (111). However, Bishop does not teach a tapered fluted enlargement being tapered at opposite sides so the expander is reversible or the expander expanding the slot so the enlarged end is biased to retentively engage a body located adjacent the intermediate section. Etten illustrates in Figure 5 a tapered fluted enlargement (24, 25) being tapered at opposite sides so the expander is reversible. Etten also illustrates the expander rod expanding the slot (25) via item 24a so the enlarged end is biased to retentively engage a body located adjacent the intermediate section. It would have been obvious to one having ordinary skill in the art at the time of invention to modify the connector system of Bishop with the expander set-up of Etten in order to easily rotate or swivel the body object.

***Allowable Subject Matter***

Claims 6 and 10 are objected to as being dependent upon a rejected base claim, but would be allowable over the prior art of record if rewritten in independent form including all of the limitations of the base claim and any intervening claims. Regarding claim 6, the claimed rod having spaced enlargements functioning as expanders separated by narrower regions is distinguishable over the prior art. Although screws are rods with spaced enlargements they do not function as connector expanders. Regarding claim 10, the prior art made of record does teach the expander being wholly within the connector member, but fails to teach driving the expander into the expanded position with a displacer.

***Conclusion***

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Manzella (US 6094874) teaches a window mount system with a sash, seal, and sill. Manzella (US 6330769) teaches a sash mount system for windows. Lindahl (US 6041552) teaches an interlock for sliding window frame assemblies.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Mark R. Wendell whose telephone number is (571) 270-3245. The examiner can normally be reached on Mon-Fri, 7:30AM-5PM, Alt. Fri off, EST.

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If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Victor Batson can be reached on (571) 272-6987. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

*Charles Fox* 8-16-07  
Charles Fox  
Primary Patent Examiner  
Art Unit 3609

MRW  
August 1, 2007